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EXAMINER

TRAN, PABLO N

ART UNIT	PAPER NUMBER
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2618

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,195	Applicant(s) BEALE, MARTIN W.	
	Examiner Pablo N. Tran	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-95 is/are pending in the application.
- 4a) Of the above claim(s) 69-90 and 93 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-68, 91-92, and 94-95 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-5, 9-15, 23-28, 32-39, 46-51, 55-61, and 91-92, and 94-95 are rejected under 35 U.S.C. 102(a) as being anticipated by Nasshan et al. (hereinafter “Nasshan”, EP0876008).

As per claims 1, 24, 47, and 91-92, Nasshan disclose a method for supporting of a plurality of chip rates in a code division multiple access (CDMA) system between a plurality of user equipment (see fig. 1/item MS) sharing a plurality of timeslots in a frame (see fig. 2, col. 4/ln. 51-col. 6/ln. 15), wherein allocating to a UE at least a first timeslot of the plurality of timeslots in the frame at a first chip rate of the plurality of chip rates based on a chip rate capability of the UE on a per timeslot basis (see fig. 3, fig. 4, fig. 5, abstract, col. 2/ln. 43-col. 3/ln. 15, col. 5/ln. 28-37, col. 5/ln. 48-col. 6/ln. 3, col. 6/ln. 42-58).

As per claims 2, 25, 48, Nasshan disclose allocating by the CDMA a timeslot for use by at least one of the plurality of chip rates (col. 5/ln. 3-col. 6/ln. 15).

As per claims 3, 26, 49, Nasshan disclose the UE is capable of operating at a plurality of chip rates (col. 6/ln. 42-58).

As per claims 4, 27, 50, Nasshan disclose the plurality of chip rates are integer multiples of a lowest supported chip rate (col. 5/ln. 3-col. 6/ln. 15).

As per claims 5, 28, 51, Nasshan disclose autonomously detecting, by the UE, a chip rate of an allocated timeslot (col. 6/ln. 42-58).

As per claims 10, 33, 56, Nasshan disclose the first and second of the plurality of chip rates are commonly controlled (col. 5/ln. 3-pg. 6/ln. 15).

As per claims 11, 34, 57, Nasshan disclose transmitting a plurality of instantiations of the at least a first timeslot of the plurality of timeslots in the frame operating at the first chip rate (col. 5/ln. 3-col. 6/ln. 15).

As per claims 12, 35, 58, Nasshan disclose the plurality of instantiations are separated in the frequency domain (col. 5/ln. 3-pg. 6/ln. 15).

As per claims 13, 36, 59, Nasshan disclose the number of the plurality of instantiations is proportional to the ratio of the bandwidth or the second chip rate system to the bandwidth of the first chip rate system (col. 5/ln. 3-col. 6/ln. 15).

As per claims 14, 37, 60, Nasshan disclose the first chip rate system operates at substantially the same carrier frequency as the second chip rate system (col. 5/ln. 3-col. 6/ln. 15).

As per claims 15, 38, 61, Nasshan disclose transmitting to the UE parameters of timeslots via broadcast signaling (col. 6/ln. 20-41).

As per claims 16, 39, 62, Nasshan disclose the system is a UMTS TDD and the step of transmitting to the UE parameters of timeslots comprises transmitting signals broadcast in system information blocks (fig. 2-3).

As per claims 23, 46, Nasshan disclose the UE receiving the transmitted frame receives an indication of the chip rate applied in a timeslot (col. 6/ln. 42-58).

As per claims 94-95, Nasshan disclose a method for supporting of a plurality of chip rates in a code division multiple access (CDMA) system between a plurality of user equipment (see fig. 1/item MS) sharing a plurality of timeslots in a frame (see fig. 2, col. 4/ln. 51-col. 6/ln. 15), wherein allocating to a UE at least a first timeslot of the plurality of timeslots in the frame at a first chip rate of the plurality of chip rates based on a chip rate capability of the UE on a per frame basis (see fig. 3, fig. 4, fig. 5, abstract, col. 2/ln. 43-col. 3/ln. 15, col. 5/ln. 28-37, col. 5/ln. 48-col. 6/ln. 3, col. 6/ln. 42-58).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-9, 17-22, 29-32, 40-45, 52-55, and 63-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nasshan et al. (hereinafter "Nasshan", EP0876008) in view of Chuah (US Pat. No. 6,115,390)

As per claims 6, 29, 52, Nasshan does not specifically disclose that the frame comprises beacon data in at least one of the plurality of timeslots. However, Chuah disclose such claimed limitation (fig. 6c). Therefore, it would have been obvious to one

Art Unit: 2618

of ordinary skill in the art at the time of invention for Nasshan to incorporate such signaling method, as taught by Chuah, in order to conserve power.

As per claims 7, 30, 53, the modified communication system of Nasshan and Chuah further disclosed the beacon data is in one of the plurality of timeslots operating at the lowest of the plurality of chip rates (see Nasshan, col. 5/ln. 3-col. 6/ln. 2, see Chuah, fig. 6c).

As per claims 8, 31, 54, the modified communication system of Nasshan and Chuah further disclosed allocating at least a second timeslot of the plurality of timeslots in the frame at a second chip rate of the plurality of chip rates, wherein the frame comprises a first beacon data in one of the plurality of timeslots operating at the first one of the plurality of chip rates and a second beacon data in another of the plurality of timeslots operating at the second chip rate (see Nasshan, col. 5/ln. 3-col. 6/ln. 15, see Chuah, fig. 5, fig. 6c).

As per claims 9, 32, 55, the modified communication system of Nasshan and Chuah further disclosed the first and second chip rates of the plurality of chip rates are controlled independently of each other (see Nasshan, col. 5/ln. 3-col. 6/ln. 3).

As per claims 17, 40, 63, the modified communication system of Nasshan and Chuah further disclosed transmitting to the UE parameters of timeslots via point to point signaling (see Chuah, col. 2/ln. 9).

As per claims 18, 41, 64, the modified communication system of Nasshan and Chuah further disclosed the point to point signaling defines the timeslot parameters for a single allocation (see Nasshan, col. 5/ln. 3-col. 6/ln. 2).

As per claims 19, 42, 65, the modified communication system of Nasshan and Chuah further disclosed the point to point signaling defines the timeslot parameters for a multiplicity of allocations (see Nasshan, col. 5/ln. 3-col. 6/ln. 2).

As per claims 20, 43, 66, the modified communication system of Nasshan and Chuah further disclosed the system comprises a UMTS TDD system, and the point to point signaling is carried in radio resource control (RAC) messages (see Chuah, col. 9/ln. 50-64).

As per claims 21, 44, 67, the modified communication system of Nasshan and Chuah further disclosed the system comprises a UMTS TDD system, and the point to point signaling is carded in medium access control (MAC) message (see Chuah, col. 9/ln. 50-64).

As per claims 22, 45, 68, the modified communication system of Nasshan and Chuah further disclosed the system comprises a UMTS TDD system, and the point to point signaling is carried in physical layer messages (see Chuah, col. 11/ln. 29-46).

Response to Arguments

5. Applicant's arguments filed 11/24/09 have been fully considered but they are not persuasive.

The Applicant's state that, Nasshan fails to disclose any mechanism that is able to change the chip rate between timeslots or frames in order to support a plurality of chip rates. In contrast, Nasshan discloses a mechanism where the spreading factor of a code can be changed between time slots. This, however, has no relationship

Art Unit: 2618

whatsoever with chip rates. Hence, Nasshan fails to disclose the feature of Claims 1, 24 and 47 of: "allocating to a UE at least a first timeslot of the plurality of timeslots in the frame at a first chip rate of the plurality of chip rates based on a chip rate capability of the UE on a per timeslot basis." Therefore, the suggestion in the Office Action that Nasshan also discloses "... allocating to a UE at least a first timeslot of the plurality of timeslots in the frame at a first chip rate of the plurality of chip rates based on a chip rate capability of the UE on a per timeslot basis" of Claims 1, 24 and 47 is also technically incorrect. In repose to the Applicant, Nasshan disclose a mechanism for adapting a bit rate in a CDMA communication system wherein based upon the capabilities of the receiving user device and selecting a number of timeslots in accordance with the required bit rate and the receiving capabilities and allocating the bits rate to the selected time slot (see pg. 3/ln. 7-pg. 3/ln. 15). Therefore, the rejection is proper.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for Published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-directauspto.gov>. Should You have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or CANADA) or 571-272-1000.

February 16, 2010

/Pablo N Tran/

Primary Examiner, Art Unit 2618